

Art Unit: 1754

gas such that the gas is relatively dry after undergoing said process comprising the steps of

- (a) spraying a mixture of chemical reagent and water into the gas inside an enclosure while separately controlling the components of said mixture; and
- (b) collecting the products of the chemical reaction and particulates inside said enclosure with the condensate on a solid surface, also inside said enclosure, whose temperature does not exceed the dew point temperature of the gas.

- 11. The process according to claim 1 wherein said mixture is sprayed into the gas by an injector means.
- 12. The process according to claim 1 wherein said enclosure has an inlet means to allow entry of the gas.
- 13. The process according to claim 1 wherein said enclosure has an outlet means to allow exit of the gas.
- 14. The process according to claim 1 wherein said solid surface is cooled by a cooling means.
- 15. The process according to claim 1 wherein said solid surface is cleaned of collected condensate, products of the chemical reaction and particulates by a cleaning means.
- 16. The process according to claim 1 wherein the amount of chemical reagent in said mixture is controlled by a chemical reagent supply flow control means.
- 17. The process according to claim 1 wherein the amount of water in said mixture is controlled to prevent supersaturating the gas by a water supply flow control means.

REMARKS:

- 1. The title of the application has been revised to comply with 4 of the Office communication.